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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/737,388

12/16/2003

Hong Min

POU920030170US1

5371

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7590

04/18/2008

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EXAMINER

ANYA, CHARLES E

ART UNIT

PAPER NUMBER

2194

MAIL DATE

DELIVERY MODE

04/18/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/737,388	Applicant(s) MIN ET AL.	
	Examiner Charles E. Anya	Art Unit 2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3/ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 1/17/08.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-8,10-12 and 14-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-8,10-12 and 14-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-3,5-8,10-12 and 14-17 are pending in this application.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. **Claims 1-3,5-8,10-12 and 14-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

The following terms antecedent basis:

- i. “the sender computer process” on line 12 of claims 1 and 10.

For the purpose of this office action the Examiner would change “a sender” to “a sender computer process”.

- ii. “the receiver” on lines 16 and 17 of claims 1 and 10 respectively.

For the purpose of this office action the Examiner would change “the receiver” to “the receiver computer process”.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3 and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pub. No. 6,487,607 B1 to Wollrath et al. in view of U.S. Pub. No. 2001/0047406 to Araujo et al.

4. As to claim 1, Wollrath teaches a method of transferring executable program code between computer processes, the method comprising: providing by a sender computer process an object which comprises a hashtable, the hashtable having at least one set of elements, one element of the at least one set of elements comprising executable program code (Steps 702/703 Col. 10 Ln. 41 – 50), the providing comprising: creating an empty hashtable, integrating executable program code into the hashtable (Col. 10 Ln. 45 – 50), and serializing the hashtable into a serialized data object for transport to the receiver computer process (“...marshals parameter...” Col. 10 Ln. 48 – 50); wherein the program code comprises logic which employs as data input the hashtable (“...object array...including code or reference to code...” Col. 10 Ln. 45 – 61) and transferring the object from the sender computer process to a receiver computer process (Step 703 “...transmits...” Col. 10 Ln. 48 – 50), retrieving the executable program code from the hashtable (Steps 704-706 Col. 10 Ln. 612 - 67) and invoking the executable program code with the at least one other element of the hashtable as data input thereto (Steps 707-710 Col. 11 Ln. 8 – 14).

Wollrath is silent with reference to wherein data is added to the hashtable by the receiver computer process prior to invoking of the executable program code retrieved from the hashtable with the hashtable as the only data input thereto.

Araujo teaches wherein data is added to the hashtable by the receiver computer process prior to invoking of the executable program code retrieved from the hashtable with the hashtable as the only data input thereto (“...authenticates...” page 23 paragraph 203).

It would have been obvious to one of ordinary skill the art the time the invention was made to modify the system of Wollrath with the teaching of Araujo because the teaching of Araujo would improve the system of Wollrath by providing a technique of attempting to verify the digital identity of the sender of a communication where the sender being authenticated, often referred to as the principal, may be a person using a computer, a computer itself or a computer program.

5. As to claim 2, Wollrath teaches the method of claim 1, wherein the at least one set of elements comprises multiple tuples, each tuple comprising a first element and a second element (“...object id, method hash...” Col. 10 Ln. 48 – 61), and wherein the second element of at least one tuple comprises the program code (method hash...” Col. 10 Ln. 48 – 61), and the second element of at least one other tuple comprises data relevant to the program code (“...method hash...” Col. 10 Ln. 48 – 61).

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6. As to claim 3, Wollrath teaches the method of claim 1, wherein the providing comprises providing the object as a serialized data object and transporting the serialized data object from the sender computer process to the receiver computer process (“...marshals parameter...” Col 10 Ln. 48 – 67), and wherein the method further comprises deserializing the serialized data object at the receiver computer process to obtain the hashtable, scanning the hashtable for executable program code (Steps 704-706 Col. 10 Ln. 62 – 67), and invoking the program code with at least other of the hashtable as data input thereto (Step 707 Col. 11 Ln. 8 – 14).

7. As to claims 10-12, see the rejection of claims 1-3 respectively.

8. Claims 5-8 and 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pub. No. 6,487,607 B1 to Wollrath et al. in view of U.S. Pub. No. 2001/0047406 to Araujo et al. as applied to claims 1 or 10 above, and further in view of U.S. Pat. No. 6,721,740 B1 to Skinner et al.

9. As to claim 5, Araujo and Wollrath are silent with reference to the method of claim 1, wherein the providing comprises providing multiple serialized objects, each serialized object having a different hashtable therein, and transporting a first serialized object from a first sender computer process to a receiver computer process and transporting a second serialized object from a second sender computer process to the receiver computer process, and deserializing the first serialized object and the second

serialized object at the receiver computer process to obtain a first hashtable and a second hashtable.

Skinner teaches the method of claim 1, wherein the providing comprises providing multiple serialized objects, each serialized object having a different hashtable therein, (Clients 300A/300B "...serialized..." Col. 16 Ln. 21 – 33) and transporting a first serialized object from a first sender computer process to a receiver computer process and transporting a second serialized object from a second sender computer process to the receiver computer process (Clients 300A/300B "...by one application..." Col. 16 Ln. 21 – 51), and deserializing the first serialized object and the second serialized object at the receiver computer process to obtain a first hashtable and a second hashtable (Server-Side Communication Management Components 305A/305B Col. 16 Ln. 46 – 51).

It would have been obvious to one of ordinary skill the art the time the invention was made to modify the system of Araujo and Wollrath with the teaching of Skinner because the teaching of Skinner would improve the system of Araujo and Wollrath by providing a process for inter-process communication whereby data is exchanged between programs using a shared memory and running at the same time.

10. As to claim 6, Skinner teaches the method of claim 5, wherein the first sender computer process, the second sender computer process, and the receiver computer process are on different computing units (figure 3).

11. As to claim 7, Skinner teaches the method of claim 5, further comprising merging the first hashtable received from the first sender computer process and the second hashtable received from the second sender computer process at the receiver computer process into a common hashtable (“...shared portion of memory...” Col. 16 Ln. 34 – 51), and iterating through the common hashtable for executable program code to be invoked using the common hashtable as the only data input thereto (“...read out...” Col. 16 Ln. 34 – 51).

As to claim 8, Araujo teaches the method of claim 7, further comprising adding data to the common hashtable at the receiver computer process, the data being relevant to executable program code in the common hashtable and being added prior to invoking the executable program code using as data input only the common hashtable (“...authenticates...” page 23 paragraph 203).

12. As to claims 14-17, see the rejection of claims 5-8 respectively.

Response to Arguments

Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles E. Anya whose telephone number is 571-272-3757. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on 571-272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Meng-Ai An/
Supervisory Patent Examiner, Art Unit 2195

cea.